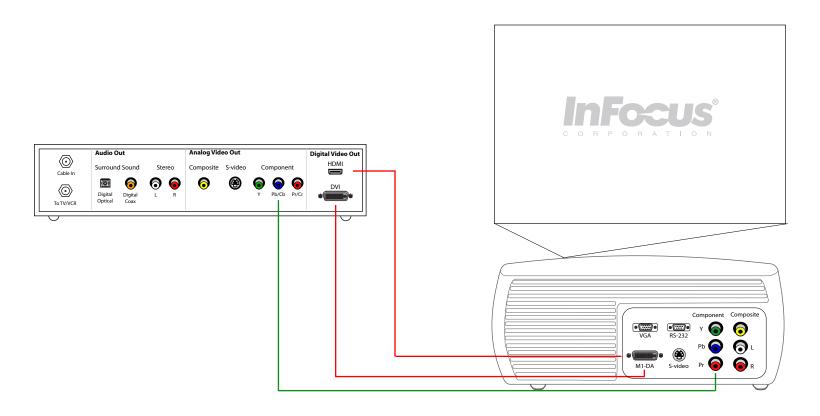
# InFocus Projector Setup Guide for an HDTV receiver

How to connect an HDTV receiver to an InFocus projector



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- Premium If you have a DVI port on your HDTV receiver and a M1 port on your projector, see page 4.
- Premium If you have a HDMI port on your HDTV receiver and a M1 port on your projector, see page 5.

#### For more information and troubleshooting...

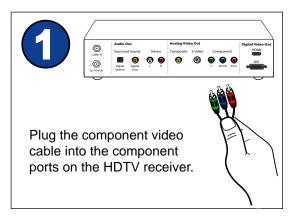
Read the tips, common issues and frequently asked questions on pages 6-8.

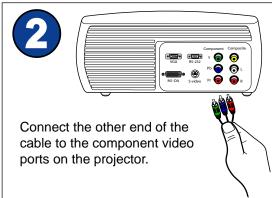


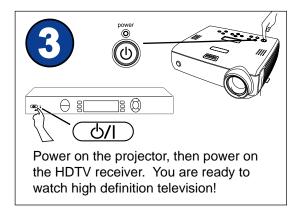
## Connect an HDTV receiver to a component-ready projector using a component video cable

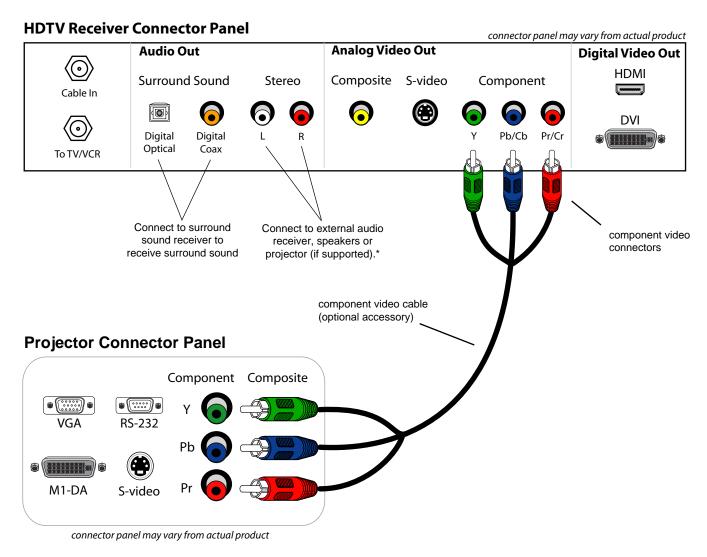


- HDTV receiver with component video-out ports
- Projector with component video-in ports
- Component video cable (red, green, blue male RCA)









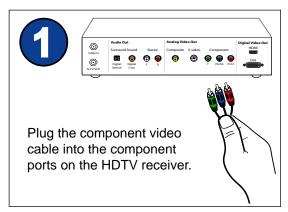
<sup>\*</sup> We recommend connecting the HDTV receiver to an external sound system to provide the best audio experience.

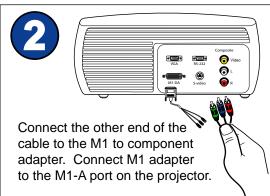
## Connect an HDTV receiver to a projector (w/o component) using a component video cable

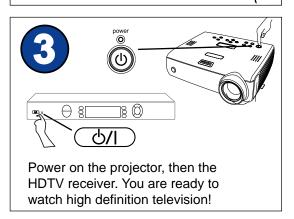


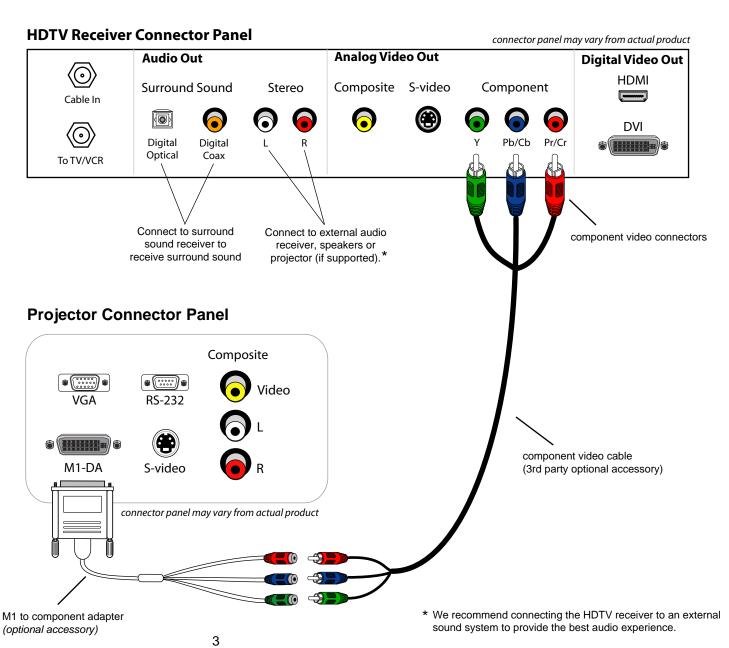
- HDTV receiver with component video-out ports
- Projector without component video-in ports

- M1 to component adapter (InFocus part #SP-M1-ADPT)
- Component video cable (red, green, blue male RCA)





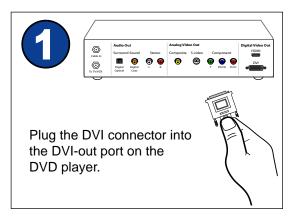


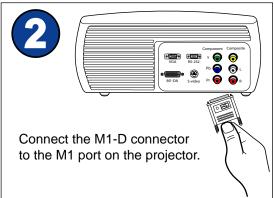


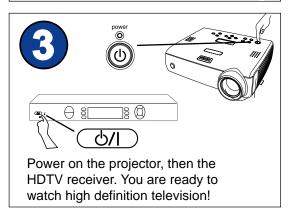
## Connect an HDTV receiver to a projector using a DVI (digital video interface) cable

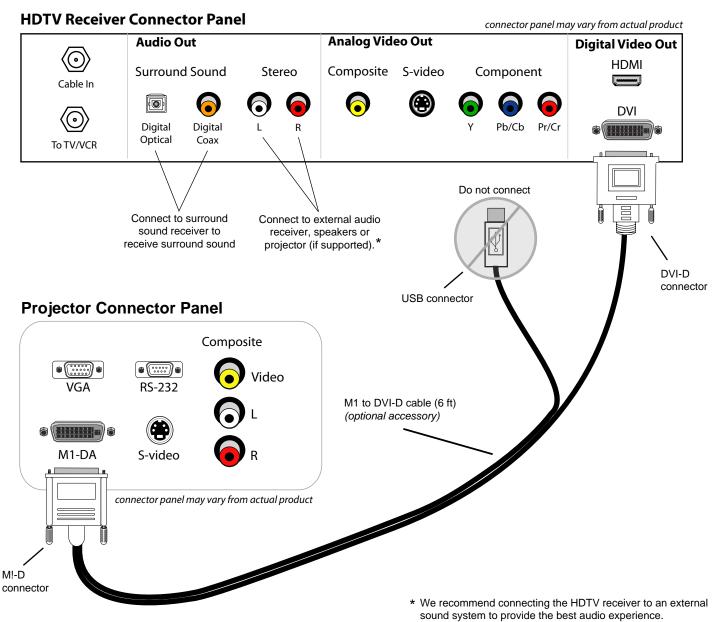


- HDTV receiver with DVI-out port
- Projector with M1-D port and HDCP support
- M1 to DVI cable (6 ft, InFocus part #SP-DVI-D or 33 ft, InFocus part #SP-M1-10M)







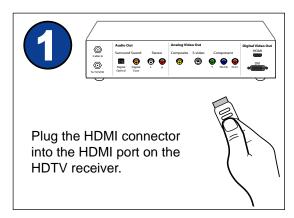


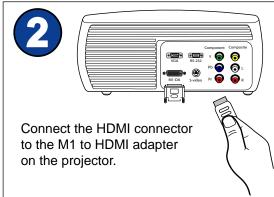
## Connect an HDTV receiver to a projector using an HDMI (high definition multimedia interface) cable

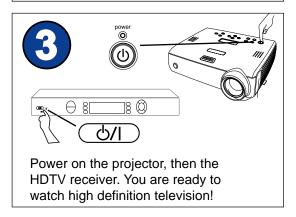


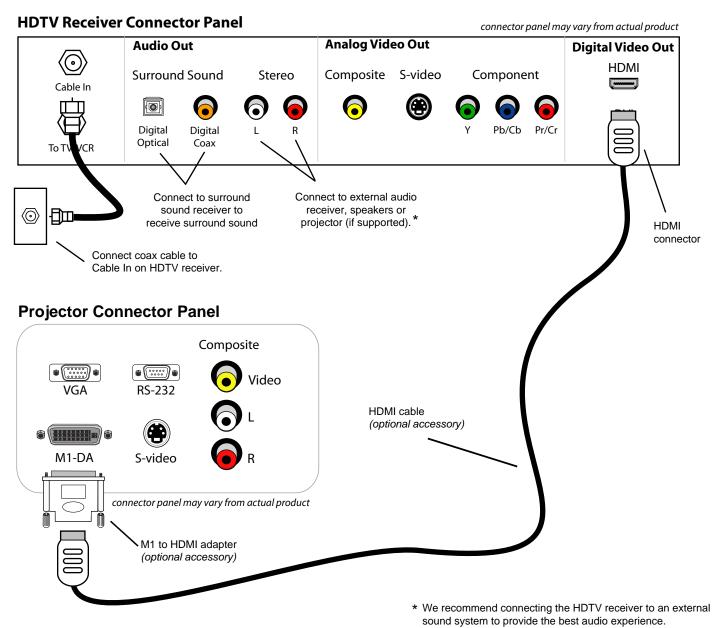
- HDTV receiver with HDMI-out port
- Projector with M1 port and HDCP support

- M1 to HDMI adapter (2 in, InFocus part #SP-HDMI-ADPT)
- HDMI cable (3rd party)









### **Tips**

- For the best sound, we recommend connecting the HDTV receiver to an audio receiver or a surround sound system. Only optical and coaxial audio cables support 5.1 surround sound. With red and white RCA audio cables, you only receive 2.1 stereo sound.
- If you are connecting your HDTV receiver to the M1 port, you need a special adapter. Refer to the Service and Support web site or the InFocus user guide to reference the video connectivity charts.
- DVI will provide the best signal. Current HDTV receivers have DVI and component connectors. Older HDTV receivers may only have component video. Composite and S-video cables cannot transmit a high definition signal.
- Check your HDTV receiver's aspect ratio, output type and 4:3 override settings in the menu.
  - Aspect ratio will control how the HDTV receiver will display the signal. Make sure the aspect ratio of the HDTV receiver matches the standard aspect ratio of your projector. This will maintain the proportion of your video image.
  - Output type is the preferred video format for high definition television stations. There are two choices: 720p or 1080i.
     720p is recommended for the best video quality.
  - 4:3 override is the video format for standard programming. There are two choices: 480i or 480p.
     480p is recommended for the best video quality.
- When sending video through DVI, ensure that your projector is HDCP compatible. All InFocus ScreenPlay models with M1 ports are HDCP compatible. Most business projectors are not compatible. Consult the Service and Support web site or user guide.
- We recommend DVI cables to not exceed 33 feet. When purchasing third party cables, always look at their rating. Cables may have ratings of a shorter distance based on the signal format that you are using. Higher resolution formats will have shorter distance ratings. (i.e. a cable may be rated for 720p, but may be rated only 15 feet for 1080p signal.)
- All TV stations are not broadcast in high definition (720p or 1080i). Commercials and some channels will be displayed in 480i or 480p. Check with your cable provider to verify which channels are displayed in high definition.
- Visit the Service and Support web site at http://www.infocus.com/service for further projector support, including FAQs, firmware, user guides and connectivity information.

#### **Common Issues**

#### SYMPTOMS: Light bar rolling from bottom to top

**Solution:** This is probably a ground loop issue. Ground loop effects are caused by a differential in the power between the source and projector. The solution is to ground the source and projector. Use a ground loop isolator and/or plug both the source and projector to the same power outlet.

A rolling bar can also be caused by poorly shielded cabling. Make sure you use quality cables

#### SYMPTOMS: Static, noise, or video artifacts in video image

**Solution:** Usually you can eliminate a lot of video defects by using high quality cable in as short a length as possible. For the best results, we recommend using DVI or component cables with the projector. Composite and S-video cables do not support high definition and produce lower quality video. Try to keep cable length to less than 10 feet. If the setup requires a longer cable, make sure to use the thicker, well-shielded cables.

#### SYMPTOMS: No video image from the projector

#### Solution:

- Check the coaxial cable connection to the HDTV box.
   Typically, there are two coax connections on an HDTV receiver: To TV and Cable In. Make sure the cable is securely connected to the Cable In port.
- Make sure the projector is searching the correct input (see the projector user's guide). If Auto Source is turned off, you need to manually change the source that the projector is searching. Press the Auto Source or Video button the projector keypad or remote.
- Try a different video cable. The cable may be defective.
- Some video ports do not accept progressive signals. Refer to connectivity chart on the Service and Support web site.

#### SYMPTOMS: Image is not perfectly rectangular (keystoning)

**Solution:** When a projected image is wider at the top or the bottom (horizontal keystoning), or taller on the right or left side (vertical keystoning), the projector is not perpendicular to the screen, either in the vertical plane or the horizontal plane.

If the sides are angled, then you need to raise or lower the front of the projector. Also, most projectors have digital vertical keystone correction that you can adjust in the projector menu. If the top and bottom of the image are angled, then you need to rotate the projector left or right until the image is rectangular. Most projectors do not have digital horizontal keystone correction.

## SYMPTOMS: Image proportion is incorrect (i.e. people appear too tall or too short)

**Solution:** The aspect ratio is set incorrectly on the projector and/or the HDTV receiver. Make sure the projector and HDTV receiver aspect ratio are the same. In the projector menu, you can adjust the aspect ratio. In the HDTV receiver menu, you can adjust the aspect ratio.

#### SYMPTOMS: Sound is too soft from projector speakers

**Solution:** We recommend connecting the HDTV receiver to a home theater audio receiver or amplifier to receive a more robust and quality audio experience. The speakers on the projector are meant for very small spaces.

## **Frequently Asked Questions**

# Which one is better: 480i (480 lines interlaced) or 480p (480 lines progressive)?

Most people cannot tell the difference between 480i and 480p. It depends on whether the projector or the source has the better deinterlacer chip. When you send 480i to the projector, the projector's deinterlacer converts the signal to a progressive signal. When you send 480p, the video source's deinterlacer converts the signal. We recommend sending 480i to the projector.

#### Which cable provides me with the best video quality?

Connector Type	Quality	Signal Type
Composite	Good	Analog, standard definition
S-video	Better	Analog, standard definition
Component	Best	Analog, 480i, 480p, 720p, 1080i
<b>DVI</b> (digital video interface)	Premium	Digital, 480p, 720p, 1080i, 1080p
HDMI (high definition multimedia interface)	Premium	Digital, 480p, 720p, 1080i, 1080p, up to 8 channel audio

#### What does Overscan do?

Some video devices cause noise around the edges of an image. Overscan crops approximately 3% of the image to hide this video noise. The disadvantage of this feature is that you lose part of the image. Most InFocus projectors include this option in the menu when a standard definition or interlaced signal is projected. You can turn Overscan off through the projector menu or, with some projectors, with the remote control.

# Where is the luma detail, chroma detail, CCS and noise reduction settings in the advanced menu? My advanced menu is not matching what I see in the user guide.

These range of advanced options varies, depending on which video source is active. The ones listed above are available only when composite, s-video or 480i component signals are projected. If you are sending digital, 480p, 720p or 1080i signals, these options are not available.

#### At what cable length do I lose video quality?

The answer depends on the quality of cabling you use. Some cables begin to lose noticeable quality beyond 10 feet. Higher quality cables can maintain a clean signal beyond 25 feet. To guarantee the best video quality, we recommend using heavy duty shielded cabling (for example Monster Cable or Belkin). Use as short a cable as your setup allows.

#### When is the projector's deinterlacer used?

The projector's deinterlacer is used when you send an interlaced signal to the projector. If you send composite, S-video or 480i component video to the projector, the deinterlacer is used. If you send progressive, the source device's deinterlacer would be used.